WHAT IS CLAIMED IS:

1.    A    method    for    performing    compression, comprising:

receiving  a  previous  flow  at  a  decompressor,  the previous   packet   flow   associated   with   a   context identifier;

determining  that  a  previous  inactive  time  of  the previous flow has exceeded an expiration period;

establishing   that   the   context   identifier   has expired;

receiving  a  compressed  packet  associated  with  the context identifier, the compressed packet received in the place  of  a  full  header  packet  corresponding  to  the context identifier; and

establishing  that  the  full  header  packet  is  lost  in response to receiving the compressed packet.

2.    The   method   of   Claim   1,   wherein   the   context identifier  is  assigned  to  the  flow  by  determining  at  a compressor   that   the   previous   inactive   time   of   the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period.

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3.    The method of Claim 1, further comprising:

determining at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period;

establishing that the context identifier is available;

assigning the context identifier to the flow in response to establishing that the context identifier is available; and

sending the flow to the decompressor.

4.    The method of Claim 1, further comprising:

determining at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period; and

establishing that the context identifier is available.

5.    The method of Claim 1, further comprising:

establishing that the context identifier is available;

assigning the context identifier to the flow;

appending the full header corresponding to the context identifier to the flow; and

sending the flow to the decompressor.

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6.   A   system   for   performing   compression,
comprising:

a buffer of a decompressor operable to receive a
previous flow, the previous flow associated with a
5    context identifier; and

a processor coupled to the buffer and operable to:

determine that a previous inactive time of the
previous flow has exceeded an expiration period;

establish that the context identifier has
10   expired;

receive a compressed packet associated with the
context identifier, the compressed packet received in the
place of a full header packet corresponding to the
context identifier; and

15   establish that the full header packet is lost
in response to receiving the compressed packet.

7.   The system of Claim 6, wherein the context
identifier is assigned to the flow by determining at a
20   compressor that the previous inactive time of the
previous flow associated with the context identifier has
exceeded a previous maximum allowed inactivity period.

8. The system of Claim 6, further comprising a compressor operable to:

determine that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period;

establish that the context identifier is available;

assign the context identifier to the flow in response to establishing that the context identifier is available; and

send the flow to the decompressor.

9. The system of Claim 6, further comprising a compressor operable to:

determine that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period; and

establish that the context identifier is available.

10. The system of Claim 6, further comprising a compressor operable to:

establish that the context identifier is available;

assign the context identifier to the flow;

append the full header corresponding to the context identifier to the flow; and

send the flow to the decompressor.

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11. Logic for performing compression, the logic embodied in a medium and operable to:

receive a previous flow at a decompressor, the previous flow associated with a context identifier;

determine that a previous inactive time of the previous flow has exceeded an expiration period;

establish that the context identifier has expired;

receive a compressed packet associated with the context identifier, the compressed packet received in the place of a full header packet corresponding to the context identifier; and

establish that the full header packet is lost in response to receiving the compressed packet.

12. The logic of Claim 11, wherein the context identifier is assigned to the flow by determining at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period.

13. The logic of Claim 11, further operable to:

determine at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period;

establish that the context identifier is available;

assign the context identifier to the flow in response to establishing that the context identifier is available; and

send the flow to the decompressor.

14.  The logic of Claim 11, further operable to:

determine at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period; and

establish that the context identifier is available.

15.  The logic of Claim 11, further operable to:

establish that the context identifier is available;

assign the context identifier to the flow;

append the full header corresponding to the context identifier to the flow; and

send the flow to the decompressor.

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        16.    A    system    for    performing    compression,
comprising:

        means    for    receiving    a    previous    flow    at    a
decompressor, the previous flow associated with a context
 5      identifier;

        means for determining that a previous inactive time
of the previous flow has exceeded an expiration period;

        means for establishing that the context identifier
has expired;

 10     means for receiving a compressed packet associated
with   the   context   identifier,   the   compressed   packet
received   in   the   place   of   a   full   header   packet
corresponding to the context identifier; and

        means for establishing that the full header packet
 15     is lost in response to receiving the compressed packet.

17. A method for performing compression, comprising:

determining at a compressor that a previous inactive time of a previous flow associated with a context identifier has exceeded a previous maximum allowed inactivity period;

establishing that the context identifier is available;

assigning the context identifier to a flow in response to establishing that the context identifier is available; and

appending a full header corresponding to the context identifier to the flow;

sending the flow to a decompressor;

determining at the decompressor that the previous inactive time of the previous flow has exceeded an expiration period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period;

establishing that the context identifier has expired;

receiving a compressed packet associated with the context identifier, the compressed packet received in the place of the full header packet corresponding to the context identifier; and

establishing that the full header packet is lost in response to receiving the compressed packet.